



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,634	02/13/2004	Timothy Patrick Jon Perry	52493.000368	5377

21967 7590 09/28/2011

HUNTON & WILLIAMS LLP
INTELLECTUAL PROPERTY DEPARTMENT
2200 Pennsylvania Avenue, N.W.
WASHINGTON, DC 20037

EXAMINER

PHONGSVIRAJATI, POONSIN

ART UNIT

PAPER NUMBER

3686

MAIL DATE

DELIVERY MODE

09/28/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/777,634

Applicant(s)

PERRY ET AL.

Examiner

SIND PHONGSVIRAJATI

Art Unit

3686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-8, 10, 12-16, 18 and 19 is/are pending in the application.
- 5a) Of the above claim(s) none is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-8, 10, 12-16, 18 and 19 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-CB005)
Paper No(s) Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s) Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/01/2011 has been entered.

Status of Claims

1. In response to communication filed on 08/01/2011, claims 1, 10, 12, 18-19 are currently amended. Claims 9 and 17 are canceled. Claims 1-8, 10, 12-16, 18-19 are currently pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-19 are rejected under 35 U.S.C. 101 as being directed towards non-statutory subject matter.

Claims 18 and 19 are rejected under 35 U.S.C. 101 because the USPTO recognizes that applicants may have claims directed to computer readable media that cover signals per se, which the USPTO must reject under 35 U.S.C. § 101 as covering

both non-statutory subject matter and statutory subject matter. In an effort to assist the patent community in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following approach. A claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation "non-transitory" to the claim. *CJ: Animals - Patentability*, 1 077 0) *Gaz. Pat. Office* 24 (April 2 1, 1 987) (suggesting that applicants add the limitation "non-human" to a claim covering a multicellular organism to avoid a rejection under 35 U.S.C. § 101). Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals per se. The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support a non-transitory embodiment because a signal per se is the only viable embodiment such that the amended claim is impermissibly broadened beyond the supporting disclosure. See, e.g., *Gentry Gallery, Inc. v. Berkline Corp.*, 1 34 F. 3 d 1473 (Fed. Cir. 1998).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-8, 12, 14-16, 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US 5,235,654).

1. As to **Claim 1**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising:

- a. a raw data database configured to electronically store insurance application related documents (Anderson, Fig. 2A, 2A(Z), 2C, col. 3 line 63 to col. 4 line 19, col. 15 lines 54-57, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- b. an advance data capture system (reads on, "a rules engine") configured to convert the documents into at least one data element having an alphanumeric format (reads on, "common format")(Anderson, Fig. 4A, Fig. 7A-7E, col. 2 line 67 to col. 3 line 12, col. 21 lines 25 to col. 22 line 13, col. 26 lines 34-39);
- c. the advance data capture system determining whether each of the characters has been fully validated as corrected data (reads on, "clean data", Fig. 1B, col. 7 lines 5-55, col. 21 lines 25 to col. 22 line 13, col. 26 lines 34-39)
- d. the corrected data (reads on, "clean data") is stored in a database by the host computer for use in application processing (Anderson, col. 32 lines 59-67, col. 33 lines 50-66);
- e. the advance data capture system configured to generate an error process (reads on, "exception task") if it is determined that at least one data element is not correct (reads on, "not clean"), the advance data capture system generates an error constituted by the advance data capture system determining a process

that is to be performed on one character (reads on, "one data element") of the at least one data element that is not clean (Fig. 1B), the error correction process (reads on, "exception task") associated exclusively to the one character so as to process the one character as an individual data element (Anderson, col. 6 lines 56-63, col. 26 lines 1-21, col. 27 lines 40-65); and

f. the advance data capture system receives a resolution to the error, upon the performance of the determined process, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

g. the advance data capture system generating an error correction process being performed in conjunction with the data capture system performing a determination of whether the one character that is not correct is due to the one character itself being problematic (Anderson, col. 21 lines 10-15, col. 33 lines 8-22).

2. As to **Claim 3**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

3. As to **Claim 4**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors data converted by the rules engine (Anderson, col. 12 lines 54-65), wherein the state machine generates data tasks to enable data verification (Anderson, Fig. 4C), wherein the state machine receives responses to said data tasks (Anderson, Fig. 4C step 204), and wherein the state machine verifies data for forwarding to the operational database based upon said responses (Anderson, col. 32 lines 49-67).
4. As to **Claim 5**, Anderson teaches the system of claim 1, wherein application-related documents include electronic documents and paper documents (Anderson, col. 3 lines 34-41 and col. 4 lines 13-14).
5. As to **Claim 6**, Anderson teaches the system of claim 1, wherein the documents of a first type are stored in a first raw data database and documents of a second type are stored in a second raw data database (Anderson, Fig. 1R element 35).
6. As to **Claim 7**, Anderson teaches the system of claim 1, wherein the error process instructs a person to perform a task to resolve the error (Anderson, Fig. 1R element 32, col. 33 lines 8-22).
7. As to **Claim 8**, Anderson teaches the system of claim 1, wherein the error process instructs an automated process to perform a task to resolve the error (Anderson, Fig. 1R element 32, col. 32 lines 55-67).
8. As to **Claim 12**, Anderson teaches a method for routing and processing insurance related data, the method performed by a tangibly embodied computational device, the method comprising:

- a. receiving, by the computational device, insurance application related documents from scanners (Anderson, Fig. 2A, 2A(Z), 2C, col. 3 line 63 to col. 4 line 19, col. 15 lines 54-57),
- b. storing, by the computational device, the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- c. the advance data capture system determining whether each of the characters has been fully validated as corrected data (reads on, "clean data", Fig. 1B, col. 7 lines 5-55, col. 21 lines 25 to col. 22 line 13, col. 26 lines 34-39)
- d. converting, by the advance data capture system in the computational device, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606);
- e. storing, by the computational device, clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33);
- f. generating, by the computational device, an error process if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and
- g. receiving, by the computational device, a resolution to the error, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).
- h. the advance data capture system generating an error correction task being performed in conjunction with the data capture system performing a

determination of whether the one character that is not correct is due to the one character itself being problematic (Anderson, col. 21 lines 10-15, col. 33 lines 8-22).

5. As to **Claim 14**, Anderson teaches the method of claim 12, further comprising: monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), generating tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), receiving responses to said tasks (Anderson, col. 12 lines 1-11), and determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).
9. As to **Claim 15**, Anderson teaches the method of claim 12, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 4C).
10. As to **Claim 16**, Anderson teaches the method of claim 12, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, col. 7 lines 14-20 and see section "Sequential repair of character recognition errors").
11. As to **Claim 18**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a rules engine, the documents into at least one data element having a common format

(Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

12. As to **Claim 19**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application related documents from scanners (Anderson, Fig. 2A, 2A(Z), 2C, col. 3 line 63 to col. 4 line 19, col. 15 lines 54-57), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by an advance data capture system, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), one or more instructions for generating tasks to enable case

progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), one or more instructions for receiving responses to said tasks (Anderson, col. 12 lines 1-11), and one or more instructions for determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B); the advance data capture system generating an error correction task being performed in conjunction with the data capture system performing a determination of whether the one character that is not correct is due to the one character itself being problematic (Anderson, col. 21 lines 10-15, col. 33 lines 8-22).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 2, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654) in view of in view of Scanlon (US 5,850,480) in further view of Applicant Admitted Prior Art (AAPA).
2. As to **Claims 2 and 13**, the combination of Anderson and Scanlon does not specifically disclose that the common format is extensible Markup Language. However, it is well known to those of ordinary skill in the art, that, the coded data in the application program storage database Anderson discloses (Anderson, Fig. 1R element 35) can be structured using any number of general-purpose database storage methodologies,

including a XML markup language. Applicant is failed to adequately traverse Examiner's taking of official notice as required by MPEP 2144.03(C) and the said official notice will be taken as Applicant Admitted Prior Art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include storing the data elements and attributes inside an XML document, as is well known to do, in order to organize the folders, tables, fields, and retrieved data elements of Anderson's invention (Anderson, col. 35 line 65 to col. 36 line 28), since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

3. As to **Claim 10**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising: a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database); a advance data capture system that converts the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33); a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12

lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B); and wherein the rules engine generates an exception task if it is determined that one data element of the at least one data element that is not clean, the exception task associated exclusively to the one data element so as to process the one data element as an individual data element (Anderson, col. 6 lines 56-63, col. 27 lines 3-8); and the rules engine receives a resolution to the exception task, upon the performance of the determined process, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13); the advance data capture system generating an error correction task being performed in conjunction with the data capture system performing a determination of whether the one character that is not correct is due to the one character itself being problematic (Anderson, col. 21 lines 10-15, col. 33 lines 8-22).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data including; determining that syntax is correct; determining that required information is present; and determining that formatting is proper. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31) including; determining that syntax is correct (col. 25 lines 57-64); and determining that formatting is proper (col. 3 lines 60-67, col. 25 lines 57-64). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

The combination of Anderson and Scanlon does not specifically disclose wherein such validation including determining that required information is present. However, the Examiner takes official notice that it is well known in the art to determine whether required information is present. For example, most forms such as contact information will not be entered into a system until all the required information is present in order to submit said contact information into the system. Applicant is failed to adequately traverse Examiner's taking of official notice as required by MPEP 2144.03(C) and the said official notice will be taken as Applicant Admitted Prior Art. It would have been obvious to one of ordinary skill in the art at the time of the invention to include determine whether required information is present within the disclosure of Anderson and Scanlon for the motivation for completing forms to be filled out.

Response to Arguments

7. Applicant's arguments filed 08/01/2011 have been fully considered but they are not persuasive.

As to pages 16-17 of Applicant's remarks, Applicant alleges:

In response to such assertions, the pending Office Action sets forth comments on pages 14-15. The Office Action sets forth a portion of Applicant's arguments. The Office Action thereafter asserts:

Examiner respectfully disagrees. Using the broadest reasonable interpretation in light of the supporting disclosure, **Anderson teaches of creating an error task to at least one character (reads on, "exception task associated exclusively to at least one data element") so as to process the one character as an individual character (reads on, "the one data element as an individual data element").**...

The Office Action asserts that an example of the supporting disclosure can be found at col. 27 of Anderson. The Office Action (on page 15) sets forth such excerpt (Anderson in column 27, lines 38-65):

Still another application, and one used in the example herein, is common English given names or first names. The MGDS 50B is input to the artificial intelligence error correction processor 28, and the first name field 16" contains the letters "John" which is the character string 42 of Ja*n" from the character recognition processor 26, will be processed in the error correction processor 28 using lexical analysis. The corresponding second guess character "n" for the second character in the string 42 will also be tested using a lexical analysis to test "Jo*n." The lexical analysis example is of given names having four letters with the first letter being "J" and the last letter being "n." A lexical analysis will draw upon a list of candidate names such as "Joel," "Jack," "John," "Jake," "Jane," "Jean," "Jill," "Joan," "Judy," and "June." The example of the lexical analysis performed by the artificial intelligence error correction processor 28, requires that the input MGDS message 50B supply some information in connection with the field, to enable the first repair to take place. The information supplied is the character string from the character data buffer B of the string 42 "Ja*n," and the second guess character for the second character position, namely "n." The artificial intelligence error correction processor 28 will determine from its lexical analysis that the string "Joan" has a 50 percent certainty and the string "John" also has a 50 percent certainty.

(Emphasis added)

However, Applicant traverses the assertions set forth above (from page 14 of the Office Action). The Examiner is effectively asserting that Anderson teaches "creating an error task to at least one character... so as to process the one character as an individual character..." However,

Anderson is simply not seen to teach such features. In particular, Anderson is not seen to teach the describe "error task". Clarification of support is requested.

Examiner respectfully disagrees. The paragraph from Anderson that Applicant has recited above clearly shows that the artificial intelligence error correction processor processing an error for the correct character within the suspicious string. This is read on an exception task as exhaustively explained above. It is unclear to the Examiner why Applicant alleges Anderson does not create at least a process to correct the character error; unless Applicant is suggesting Anderson does not contain the exact phrase, "error task". Nevertheless, Examiner has provided a more detailed explanation for Applicant in the rejection above of how the prior art of Anderson reads on the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIND PHONGSVIRAJATI whose telephone number is (571)270-5398. The examiner can normally be reached on Monday - Thursday 8:00am-5:00pm (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SIND PHONGSVIRAJATI/
Examiner, Art Unit 3686

20 September 2011